

AMENDED CLAIMS

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(06/23/2004), original claims 1 to 47 replaced by amended
claims 1 to 46]

1. A device for processing and/or conveying a web in a machine which works on a web and/or processes a web, having at least one web processing tool (06, 07, 05, 28, 32) embodied as a former (06, 07), or as a cutter (05, 28, 32) arranged on the web path upstream of the latter, wherein the cutter (05, 28, 32) and the former (06, 07) are movable by at least one actuating member (08, 11, 34) transversely to the running direction of the web of material (01, 02, 26, 36), characterized in that a turning bar unit (72) with at least one turning bar (37, 38) is arranged upstream of the former (06, 07), the turning bar (37, 38) and the former (06, 07) can be moved transversely in respect to the running direction of the web of material (01, 02, 26, 36) by drive mechanisms (11, 49) which are respectively mechanically independent of each other, and that the drive mechanism (11) of the former (06, 07) and the drive mechanism (49) of the turning bar (37, 38) are in a logical functional connection with a common control device (10, S).

2. The device in accordance with claim 1,
characterized in that the former (06, 07) and the cutter (05,

28, 32) are arranged on a common stand (15) and can be moved by means of a common drive mechanism (11).

3. A device for processing and/or conveying a web in a machine which works on a web and/or processes a web, having at least one web processing tool (06, 07, 30) embodied as a former (06, 07), and with a web processing tool (06, 07, 30) embodied as a motor driven roller (30) arranged on the web path downstream of the latter, characterized in that two outer and one central former (06, 07) are provided, wherein in case of a change of the width of the partial webs the two outer formers (06, 07) can be displaced and the center one remains in place, and that the displaceable former (06, 07) and the assigned roller (30) are movable by at least one actuating member (08, 11) transversely to the running direction of the web of material (01, 02, 26, 36).

4. The device in accordance with claim 3, characterized in that the former (06, 07) and the roller (30) are arranged on a common stand (15) and can be moved by means of a common drive mechanism (11).

5. The device in accordance with claim 3, characterized in that a cutter (05, 28, 32), arranged upstream of the former (06, 07), and the former (06, 07) can be moved by at least one actuating member (08, 11, 34) transversely to the running direction of the web of material (01, 02, 26, 36).

6. The device in accordance with claim 1 or 5, characterized in that the cutter (28, 32) is embodied as a cutter (28, 32) of a longitudinal cutting arrangement (71) arranged upstream of the former (06, 07), which has a lateral drive mechanism (34) which is mechanically independent of a drive mechanism (11) of the former (06, 07).

7. The device in accordance with claim 6, characterized in that the drive mechanism (11) of the former (06, 07) and the drive mechanism (34) of the cutter (28, 32) are in a logical functional connection with a common control device (10, S).

8. The device in accordance with claim 1 or 6, characterized in that a turning bar unit (72) with at least

one turning bar (37, 38) is arranged upstream of the former (06, 07).

9. The device in accordance with claim 6 and 8, characterized in that the longitudinal cutting arrangement (71) is placed upstream of the turning bar unit (72).

10. The device in accordance with claim 8, characterized in that the turning bar (37, 38) and the former (06, 07) can be moved transversely in respect to the running direction of the web of material (01, 02, 26, 36) by drive

mechanisms (11, 49) which are respectively mechanically independent of each other.

11. The device in accordance with claim 10, characterized in that the drive mechanism (11) of the former (06, 07) and the drive mechanism (49) of the turning bar (37, 38) are in a logical functional connection with a common control device (10, S).

12. A device for processing and/or conveying a web in a machine which works on a web and/or processes a web, having at least one web processing tool (06, 07) embodied as a former (06, 07), and with a turning bar unit (72) arranged upstream of the latter on the web path, having at least one web processing tool (37, 38) designed as a turning bar (37, 38), characterized in that the turning bar (37, 38) and the former (06, 07) can be moved transversely in respect to the running direction of the web of material (01, 02, 26, 36) by drive mechanisms (11, 49), which are respectively independent of each other, and the drive mechanism (11) of the former (06, 07) and the drive mechanism (49) of the turning bar (37, 38) are in a logical functional connection with a common control device (10, S).

13. A device for processing and/or conveying a web in a machine which works on a web and/or processes a web, having a longitudinal cutting arrangement (71) with at least one web

processing device (28, 32) embodied as a cutter (28, 32), as well as a turning bar unit (72) arranged downstream thereof on the web path and having at least one web processing tool designed as a turning bar (37, 38), characterized in that the cutter (28, 32) and the turning bar (37, 38) can be moved transversely in respect to the running direction of the web of material (01, 02, 26, 36) by drive mechanisms (34, 49), which are respectively independent of each other, and that the drive mechanism (34) of the cutter (28) and the drive mechanism (49) of the turning bar (37, 38) are in a logical functional connection with a common control device (10, S).

14. The device in accordance with claims 6, 9 or 14, characterized in that the longitudinal cutting arrangement (71) has at least two cutters (28), which are spaced apart from each other transversely to the web running direction and can be moved in relation to each other by a common drive mechanism (34) transversely in respect to the web, but in opposite directions.

15. The device in accordance with claims 8, 9, 12 or 14, characterized in that the turning bar unit (72) has at least two turning bars (37, 38), which are spaced apart from each other transversely in relation to the web running direction of an incoming web and which can be moved transversely in respect to the web by means of a common drive mechanism (49).

16. The device in accordance with one or several of claims 7, 11, 13 or 17, characterized in that the logical functional connection is designed in such a way that the setting of the drive mechanisms (11, 34, 49) can take place in a common work step, in particular in the course of a setting process, as a result of a program flow.

17. The device in accordance with one or several of claims 7, 11, 12, 13 or 16, characterized in that the control device (10, S) is designed to determine a suitable desired position of the respective web processing tool (05, 06, 07,

28, 30, 32, 37, 38) from information regarding the web width and/or an intended web path, and to act on the respective drive mechanism (11, 34, 49).

18. The device in accordance with one or several of claims 7, 11, 12 or 13, characterized in that the control unit (10, S) comprises a user interface for entering and/or reading in the width of a web (01, 02, 12, 13, 26, 36, 51, 52, 53, 54) to be processed, computing means for determining a desired position of the movable web processing tool (05, 06, 07, 16, 28, 30, 32, 37, 38) by means of the web width, as

well as drivers for triggering the drive mechanisms (11, 23, 34, 49) for setting the respectively determined desired position.

19. The device in accordance with one or several of claims 7, 11, 12, 13 or 16, characterized in that several drive mechanisms (11, 23, 34, 49) are triggered by the common control unit (10, S).

20. The device in accordance with one of the preceding claims, characterized in that at least two formers (06, 07) are provided, at least one of which can be moved transversely.

21. The device in accordance with one of the preceding claims, characterized in that at least two web processing tools (16), which roll off on a cylinder (03) and are designed as rollers (16), at least one of which can be moved transversely, are provided for pressing the web of material against the cylinder (03).

22. The device in accordance with claim 21, characterized in that the rollers (16) are interceptor rollers (16) or traction rollers (16).

23. The device in accordance with one of the preceding claims, characterized in that the cutter (28, 32) is designed

for the continuous longitudinal cutting of the web (26, 36) of material.

24. The device in accordance with one of the preceding claims, characterized in that the cutter (05) is designed as an interval cutter (05) for longitudinally cutting the web (01, 02, 12, 13) into lengths of a page.

25. The device in accordance with one of the preceding claims, characterized in that at least one transversely movable roll arm of a roll changer is provided as a further web processing tool to be set.

26. The device in accordance with one of the preceding claims, characterized in that at least one transversely movable sensor device for the cutting registration is provided as a further web processing tool to be set.

27. The device in accordance with one of the preceding claims, characterized in that at least one transversely movable sensor device for the color registration is provided as a further web processing tool to be set.

28. The device in accordance with one of the preceding claims, characterized in that at least one transversely movable web edge regulating device is provided as a further web processing tool to be set.

29. The device in accordance with one of the preceding claims, characterized in that at least one transversely movable paddle wheel is provided as a further web processing tool to be set in the outlet of a folding apparatus.

30. The device in accordance with one of the preceding

claims, characterized in that at least one transversely movable gluing nozzle of a gluing device is provided as a further web processing tool to be set.

31. The device in accordance with one of the preceding claims, characterized in that at least one transversely movable device for forming a second longitudinal fold is provided as a further web processing tool to be set.

32. The device in accordance with one of the preceding claims, characterized in that at least one transversely

movable device for longitudinal perforation is provided as a further web processing tool to be set.

33. The device in accordance with one of the preceding claims, characterized in that at least one actuating member (08, 11, 22, 23, 33, 34, 48, 49) has a rotatable threaded spindle (08, 22, 33, 48), and that every displaceable web processing tool (05, 06, 07, 16, 28, 30, 32, 37, 38) is in engagement with the threaded spindle (08, 22, 33, 48).

34. The device in accordance with claim 33, characterized in that every displaceable web processing tool (05, 06, 07, 16, 28, 30, 32, 37, 38) coupled to the actuating member (08, 11, 22, 23, 33, 34, 48, 49) has a sliding block (09, 18, 19, 21, 42, 43, 44, 46), which is in engagement with the threaded spindle (08, 22, 33, 48).

35. The device in accordance with claim 33 or 34, characterized in that several displaceable web processing tools (06, 07, 16, 28, 37, 38) of the same type are in engagement with an identical threaded spindle (08, 22, 33, 48).

36. The device in accordance with claim 35, characterized in that the threaded spindle (08, 22, 33, 48) has several sections rotating in different directions, and

that at least one of the web processing tools (06, 07, 16, 28, 37, 38) is in engagement with each section.

37. The device in accordance with one of claims 33 to 36, characterized in that the threaded spindle (08, 22, 33, 48) is rotatingly driven by an electric motor (11, 23, 34, 49) controlled by the control unit (10, S).

38. The device in accordance with one of claims 33 to 37, characterized in that threaded spindle (08, 22, 33, 48)

has several sections of different gradients, and that at least one of the web processing tools (06, 07, 16, 28, 37, 38) is in engagement with each section.

39. The device in accordance with claim 1 or 3, characterized in that the former (06, 07) and a roller (03) having a groove (25) can be moved together.

40. The device in accordance with claims 6, 12 or 13, characterized in that the drive mechanisms (11, 23, 34, 49) can be triggered by means of a common control unit (10, S) in regard to positioning the respective web processing tool (06, 07, 05, 28, 30, 32, 37, 38) in respect to the web.

41. A method for setting web processing tools of a machine which works on a web and/or processes a web, having a former (06, 07) and an upstream arranged cutter (28, 32) for a longitudinal cut of the web, characterized in that prior to the start of a production run the actual position of the cutter (28, 32) and of the former (06, 07) in regard to presetting values required for the planned production run are checked by a system (S), and/or presetting is performed by the system (S) acting on the drive (11) of the former (06, 07), as well as the drive mechanism (34) of the cutter (28, 32).

42. A method for setting web processing tools of a

machine which works on a web and/or processes a web, having a former (06, 07) and an upstream arranged turning bar (37, 38), characterized in that prior to the start of a production run the actual position of the turning bar (37, 38) and of the former (06, 07) in regard to presetting values required for the planned production run are checked by a system (S), and/or presetting is performed by the system (S) acting on the drive (11) of the former (06, 07), as well as the drive mechanism (49) of the turning bar (37, 38).

43. A method for setting web processing tools of a machine which works on a web and/or processes a web, having a cutter (28, 32) for longitudinal cutting of the web and a downstream arranged turning bar (37, 38), characterized in that prior to or during the start of the production run the actual position of the cutter (28, 32) and of the former (06, 07) in regard to presetting values required for the planned production run are checked by a system (S), and/or presetting is performed by the system (S) acting on the drive (11) of the former (06, 07), as well as the drive mechanism (34) of the cutter (28, 32).

44. The method in accordance with claim 42, characterized in that presetting is also performed by the system (S) acting on a drive mechanism (34) of a cutter (28, 32) arranged upstream of the turning bar (37, 38).

45. The method in accordance with one or several of claims 41 to 44, characterized in that presetting is also performed by the system (S) acting on a drive mechanism of a longitudinal registration arrangement placed downstream of the drive mechanism of the turning bar (37, 38).

46. The method in accordance with one or several of claims 41 to 44, characterized in that presetting is also performed by the system (S) acting on the drive mechanism of at least one roll arm of a roll changer.